File 347:JAPIO Oct 1976-2003/Jul(Updated 031105)
(c) 2003 JPO & JAPIO
File 348:EUROPEAN PATENTS 1978-2003/Nov W01
(c) 2003 European Patent Office
File 349:PCT FULLTEXT 1979-2002/UB=20031106,UT=20031030
(c) 2003 WIPO/Univentio
File 350:Derwent WPIX 1963-2003/UD,UM &UP=200373
(c) 2003 Thomson Derwent
File 256:SoftBase:Reviews,Companies&Prods. 82-2003/Oct
(c)2003 Info.Sources Inc
File 35:Dissertation Abs Online 1861-2003/Oct
(c) 2003 ProQuest Info&Learning
File 583:Gale Group Globalbase(TM) 1986-2002/Dec 13
(c) 2002 The Gale Group
File 65:Inside Conferences 1993-2003/Nov W2
(c) 2003 BLDSC all rts. reserv.
File 2:INSPEC 1969-2003/Nov W1
(c) 2003 Institution of Electrical Engineers
File 233:Internet & Personal Comp. Abs. 1981-2003/Jul
(c) 2003, EBSCO Pub.
File 474:New York Times Abs 1969-2003/Nov 12
(c) 2003 The New York Times
File 475:Wall Street Journal Abs 1973-2003/Nov 12
(c) 2003 The New York Times
File 99:Wilson Appl. Sci & Tech Abs 1983-2003/Oct
(c) 2003 The HW Wilson Co.
File 95:TEME-Technology & Management 1989-2003/Oct W4
(c) 2003 FIZ TECHNIK
File 15:ABI/Inform(R) 1971-2003/Nov 13
(c) 2003 ProQuest Info&Learning
File 9:Business & Industry(R) Jul/1994-2003/Nov 12
(c) 2003 Resp. DB Svcs.
File 610:Business Wire 1999-2003/Nov 13
(c) 2003 Business Wire.
File 810:Business Wire 1986-1999/Feb 28
(c) 1999 Business Wire
File 275:Gale Group Computer DB(TM) 1983-2003/Nov 12
(c) 2003 The Gale Group
File 476:Financial Times Fulltext 1982-2003/Nov 13
(c) 2003 Financial Times Ltd
File 624:McGraw-Hill Publications 1985-2003/Nov 13
(c) 2003 McGraw-Hill Co. Inc
File 636:Gale Group Newsletter DB(TM) 1987-2003/Nov 12
(c) 2003 The Gale Group
File 621:Gale Group New Prod.Annou.(R) 1985-2003/Nov 13
(c) 2003 The Gale Group
File 613:PR Newswire 1999-2003/Nov 13
(c) 2003 PR Newswire Association Inc
File 813:PR Newswire 1987-1999/Apr 30
(c) 1999 PR Newswire Association Inc
File 16:Gale Group PROMT(R) 1990-2003/Nov 12
(c) 2003 The Gale Group
File 160:Gale Group PROMT(R) 1972-1989
(c) 1999 The Gale Group
File 634:San Jose Mercury Jun 1985-2003/Nov 12
(c) 2003 San Jose Mercury News
File 148:Gale Group Trade & Industry DB 1976-2003/Nov 13
(c)2003 The Gale Group
File 20:Dialog Global Reporter 1997-2003/Nov 13
(c) 2003 The Dialog Corp.
File 994:NewsRoom 2001
(c) 2003 The Dialog Corporation
File 995:NewsRoom 2000
(c) 2003 The Dialog Corporation

Set Items Description

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S1          53   AU='DITTRICH G' OR AU='DITTRICH GERHARD' OR AU='DITTRICH G-
               ERHARD DR'
S2          96   AU='DITTRICH, G':AU='DITTRICH, G.'
S3           3   (S1 OR S2) AND (MEASURED()VALUE? ?)
S4           9   (S1 OR S2) AND SENSOR? ?
S5           8   S4 NOT S3
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3/5/1 (Item 1 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS

01465440
METHOD FOR PROVIDING MEASURED VALUES FOR END USERS
VERFAHREN ZUR BEREITSTELLUNG VON MESSWERTEN FUR ENDKUNDEN
PROCEDE POUR METTRE A DISPOSITION DES VALEURS DE MESURE DESTINEES A DES UTILISATEURS FINAUX
PATENT ASSIGNEE:
Endress + Hauser GmbH + Co., (262204), Hauptstrasse 1, 79689 Maulburg, (DE), (Applicant designated States: all)
INVENTOR:
DITTRICH, Gerhard , Hauptstrasse 94a, 79650 Schopfheim, (DE
LEGAL REPRESENTATIVE:
Andres, Angelika et al (79674), Endress + Hauser (DE) Holding GmbH + Co., PatServe - Patentabteilung Colmarer Strasse 6, 79576 Weil am Rhein, (DE)
PATENT (CC, No, Kind, Date): EP 1319171 A1 030618 (Basic)
WO 2002025221 020328
APPLICATION (CC, No, Date): EP 2001974110 010804; WO 2001EP9033 010804
PRIORITY (CC, No, Date): DE 10046350 000919; EP 2001107314 010323
DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI; LU; MC; NL; PT; SE; TR
EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI
INTERNATIONAL PATENT CLASS: G01D-009/00
NOTE:
No A-document published by EPO
LEGAL STATUS (Type, Pub Date, Kind, Text):
Application: 021016 A1 International application. (Art. 158(1))
Application: 021016 A1 International application entering European phase
Application: 030618 A1 Published application with search report
Examination: 030618 A1 Date of request for examination: 20030227
LANGUAGE (Publication,Procedural,Application): German; German; German

3/5/2 (Item 1 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT

00891145 **Image available**
METHOD FOR PROVIDING MEASURED VALUES FOR END USERS
PROCEDE POUR METTRE A DISPOSITION DES VALEURS DE MESURE DESTINEES A DES UTILISATEURS FINAUX
VERFAHREN ZUM BEREITSTELLEN VON MESSWERTEN FUR ENDKUNDEN
Patent Applicant/Assignee:
ENDRESS + HAUSER GMBH + CO, Hauptstrasse 1, 79689 Maulburg, DE, DE (Residence), DE (Nationality)
Inventor(s):
DITTRICH Gerhard , Hauptstrasse 94a, 79650 Schopfheim, DE
Legal Representative:
ANDRES Angelika (agent), c/o Endress + Hauser Deutschland Holding GmbH, PatServe, Colmarer Strasse 6, 79576 Weil am Rhein, DE,
Patent and Priority Information (Country, Number, Date):
Patent: WO 200225221 A1 20020328 (WO 0225221)
Application: WO 2001EP9033 20010804 (PCT/WO EP0109033)
Priority Application: DE 10046350 20000919; EP 2001107314 20010323
Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR
(EA) AM AZ BY KG KZ MD RU TJ TM
Main International Patent Class: G01D-009/00
Publication Language: German

Filing Language: German
Fulltext Availability:
  Detailed Description
  Claims
Fulltext Word Count: 1811

English Abstract
The invention relates to a method for providing **measured values** for end users. The **measured value** of a process variable is detected by means of a sensor and is transmitted to a process management system. The number of transmission operations is counted and the costs incurred to the end user are calculated according to the number of transmission operations. The main advantage of the invention lies in the fact that the end user no longer pays for the sensor, only being charged for that which he/she really requires, i.e. the **measured value** .

French Abstract
L'invention concerne un procede pour mettre a disposition des valeurs de mesure destinees a des utilisateurs finaux. Ce procede consiste a utiliser un detecteur pour detecter une valeur de mesure d'une variable de processus, qui est ensuite transmise a un systeme de gestion de processus. Il consiste egalement a comptabiliser les operations de transmission et a calculer les couts pour les utilisateurs finaux en fonction du nombre d'operations de transmission. Le principal avantage de l'invention reside dans le fait que les frais relatifs au detecteur ne sont plus a la charge de l'utilisateur final, ce dernier supportant uniquement les frais lies a ses besoins reels, a savoir l'obtention de la valeur de mesure.

German Abstract
Bei einem Verfahren zum Bereitstellen von Messwerten fur Endkunden. Der Messwert einer Prozessvariablen wird mit Hilfe eines Sensors erfasst und an ein Prozessleitsystem ubertragen. Die Anzahl der Ubertragungsvorgange wird gezahlt und die Kosten fur den Endkunden in Abhangigkeit der Anzahl der Ubertragungsvorgange berechnet. Der wesentliche Vorteil der Erfindung besteht darin, dass der Endkunde nicht mehr fur den Sensor selbst zahlt, sondern nur fur das, was er wirklich benotigt, den Messwert.

Legal Status (Type, Date, Text)
Publication 20020328 A1 With international search report.
Publication 20020328 A1 Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.
Publication 20020328 A1 Published entirely in electronic form (except the front page) and available upon request from the International Bureau.

3/5/3 (Item 1 from file: 350)
DIALOG(R)File 350:Derwent WPIX

008284974 **Image available**
WPI Acc No: 1990-171975/199023
XRPX Acc No: N90-133691
Transformer detecting oil leakage - from comparing oil level in expansion vessel with oil temp. within transformer
Patent Assignee: VEB GASKOM SELBMANN (VEBK); ENERGIEWERKE SCHWARZE PUMPE AG (ENER-N)
Inventor: **DITTRICH G** ; GITTIG I; HAHRI V; KOCH H J; KOCH S; GUETTIG I; HAHN V; KOCH H
Number of Countries: 001 Number of Patents: 002
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
DD 274714	A	19891227	DD 318601	A	19880803	199023	B
DD 274714	B5	19930826	DD 318601	A	19880803	199340	

Priority Applications (No Type Date): DD 318601 A 19880803
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
DD 274714	B5			H02H-005/06	

Abstract (Basic): DD 274714 A

The oil level in the expansion vessel and the oil temp. within the transformer are monitored. Both **measured values** are fed to a comparator circuit for comparison with one another. A leakage signal is generated when the compared values differ by a given amt.

ADVANTAGE - High operating reliability. (Dwg.No.1

Title Terms: TRANSFORMER; DETECT; OIL; LEAK; COMPARE; OIL; LEVEL; EXPAND; VESSEL; OIL; TEMPERATURE; TRANSFORMER
Derwent Class: X12; X13
International Patent Class (Main): H02H-005/06
File Segment: EPI

5/5/1 (Item 1 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS

01405504

Method for providing measuring values and method for calculation of the costs for providing these values

Verfahren zum Bereitstellen von Messwerten und zur Berechnung der Kosten der Bereitstellung

Procede pour fournir des valeurs de mesure et procede pour la determination des frais pour fournir ces valeurs

PATENT ASSIGNEE:
Endress + Hauser GmbH + Co., (262204), Hauptstrasse 1, 79689 Maulburg, (DE), (Applicant designated States: all)
INVENTOR:
Dittrich, Gerhard , Hauptstrasse 94a, 79650 Schopfheim, (DE
LEGAL REPRESENTATIVE:
Andres, Angelika (79672), PatServ-Zentrale Patentabteilung, Endress + Hauser (Deutschland) Holding GmbH, Postfach 2222, 79574 Weil/Rhein, (DE)

PATENT (CC, No, Kind, Date): EP 1189036 A1 020320 (Basic)
APPLICATION (CC, No, Date): EP 2001107314 010323;
PRIORITY (CC, No, Date): DE 10046350 000919
DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI; LU; MC; NL; PT; SE; TR
EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI
INTERNATIONAL PATENT CLASS: G01D-009/00

ABSTRACT EP 1189036 A1 (Translated)

Method for provision of measurement values for a process control system, in which determination of costs is based on the number of measurement values transferred from a **sensor** rather than on the cost of the **sensor** itself

Method for provision of measurement values for end customers in which the value of a process variable is measured using a **sensor** (S1, S2, S3), the value is transferred to a process control system (PLS), the number of transfer processes is counted and the customer is billed on the basis of the number of transfers of the measurement value.

TRANSLATED ABSTRACT WORD COUNT: 96

ABSTRACT EP 1189036 A1

Der Meswert einer Prozesvariablen wird mit Hilfe eines **Sensors** erfast und an ein Prozesleitsystem ubertragen. Die Anzahl der Ubertragungsvorgange wird gezahlt und die Kosten fur den Endkunden in Abhangigkeit der Anzahl der Ubertragungsvorgange berechnet. Der wesentliche Vorteil der Erfindung besteht darin, das der Endkunde nicht mehr fur den **Sensor** selbst zahlt, sondern nur fur das, was er wirklich benotigt, den Meswert.

ABSTRACT WORD COUNT: 62
NOTE:
Figure number on first page: 1

LEGAL STATUS (Type, Pub Date, Kind, Text):

Application:	020320	A1	Published application with search report
Examination:	020320	A1	Date of request for examination: 20010407
Assignee:	020424	A1	Transfer of rights to new applicant: Endress + Hauser GmbH + Co.KG. (262206) Hauptstrasse 1 79689 Maulburg DE
Priority:	021204	A1	Priority information deleted: 20021016
Withdrawal:	030402	A1	Date application deemed withdrawn: 20020921

LANGUAGE (Publication,Procedural,Application): German; German; German
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(German)	200212	220
SPEC A	(German)	200212	1531
Total word count - document A			1751

Total word count - document B 0
Total word count - documents A + B 1751

5/5/2 **(Item 2 from file: 348)**
DIALOG(R)File 348:EUROPEAN PATENTS

00446152
A CAPACITIVE PRESSURE SENSOR AND A PROCESS FOR ITS MANUFACTURE.
KAPAZITIVER DRUCKSENSOR UND VERFAHREN ZU SEINER HERSTELLUNG.
CAPTEUR CAPACITIF DE PRESSION ET SON PROCEDE DE FABRICATION.
PATENT ASSIGNEE:
ENDRESS U. HAUSER GMBH U. CO., (262203), Hauptstr. 1, Postfach 1261, W-7864 Maulburg, (DE), (applicant designated states: CH;DE;FR;GB;IT;LI;NL)
INVENTOR:
DITTRICH, Gerhard , Kieler Kamp 48, W-2320 Plon, (DE)
HEGNER, Frank, Chrischonastr. 41, W-7850 Lorrach, (DE)
KLAHN, Thomas, Zasiusstrasse 81, W-7800 Freiburg i. Br., (DE
LEGAL REPRESENTATIVE:
Morstadt, Volker, Dipl.-Ing. , c/o Endress + Hauser Flowtec AG Kagenstrasse 7 Postfach 435, CH-4153 Reinach BL 1, (CH)
PATENT (CC, No, Kind, Date): EP 417237 A1 910320 (Basic)
EP 417237 B1 921111
WO 9012299 901018
APPLICATION (CC, No, Date): EP 90904838 900324; WO 90EP482
PRIORITY (CC, No, Date): DE 3910646 890401
DESIGNATED STATES (Pub A): AT; BE; CH; DE; DK; ES; FR; GB; IT; LI; LU; NL; SE; (Pub B): CH; DE; FR; GB; IT; LI; NL
INTERNATIONAL PATENT CLASS: G01L-009/12
CITED PATENTS (WO A): EP 111348 A; DE 3137219 A; EP 97339 A
NOTE:
No A-document published by EPO
LEGAL STATUS (Type, Pub Date, Kind, Text):

Application:	910320 A1	Published application (A1with Search Report ;A2without Search Report)
Examination:	910320 A1	Date of filing of request for examination: 901130
Examination:	920506 A1	Date of despatch of first examination report: 920324
Grant:	921111 B1	Granted patent
Change:	921216 B1	Designated contracting states (change)
Oppn None:	931103 B1	No opposition filed

LANGUAGE (Publication,Procedural,Application): German; German; German
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	EPBBF1	489
CLAIMS B	(German)	EPBBF1	403
CLAIMS B	(French)	EPBBF1	563
SPEC B	(German)	EPBBF1	2881

Total word count - document A 0
Total word count - document B 4336
Total word count - documents A + B 4336

5/5/3 **(Item 3 from file: 348)**
DIALOG(R)File 348:EUROPEAN PATENTS

00346760
Pressure transducer and its manufacturing process.
Drucksensor und Verfahren zu seiner Herstellung.
Capteur de pression et son procede de fabrication.
PATENT ASSIGNEE:
Endress u. Hauser GmbH u. Co., (262201), Hauptstrasse 1, W-7864 Maulburg,

(DE), (applicant designated states: CH;DE;ES;FR;GB;IT;LI;NL;SE)
INVENTOR:
Hegner, Frank, Dr., Barletenweg 1, W-7864 Maulburg, (DE)
Dittrich, Gerhard, Dr. , Griengasse 16, W-7850 Lorrach, (DE)
Klahn, Thomas, Lorracherstrasse 19a, W-7853 Steinen, (DE
LEGAL REPRESENTATIVE:
Leiser, Gottfried, Dipl.-Ing. et al (7511), Prinz & Partner, Manzingerweg 7, W-8000 Munchen 60, (DE)
PATENT (CC, No, Kind, Date): EP 351701 A2 900124 (Basic)
EP 351701 A3 910626
EP 351701 B1 930602
APPLICATION (CC, No, Date): EP 89112733 890712;
PRIORITY (CC, No, Date): DE 3825029 880722; DE 3901492 890119
DESIGNATED STATES: CH; DE; ES; FR; GB; IT; LI; NL; SE
INTERNATIONAL PATENT CLASS: G01L-009/12; G01L-007/08;
CITED PATENTS (EP A): DE 3137219 A; DE 3404262 A; DE 2706505 A

ABSTRACT EP 351701 A2 (Translated)
The pressure transducer contains a basic body and a diaphragm, which are joined together parallel to each other at a defined distance with formation of a chamber, at least one of the two joined-together parts consisting of ceramic, glass, metal or a single-crystalline material. The distance between these parts and thus the capacitance between two electrodes borne by these parts changes in dependence on the external pressure acting on the pressure transducer. The basic body and the diaphragm are thermally bonded to each other by a shaped part made of metal serving at the same time as a spacer. If at least one of the two parts consists of ceramic, glass, metal or a single-crystalline material, the two joined-together parts can be soldered together by a shaped part made of activated solder. If the two joined-together parts consist of oxide ceramics or sapphire, they can be joined together according to the "direct copper bonding" process. In this case, the shaped part consists of copper, which is joined to the two parts by a eutectic melt forming on the surface.
TRANSLATED ABSTRACT WORD COUNT: 182

ABSTRACT EP 351701 A2
Der Drucksensor enthalt einen Grundkorper und eine Membran, die unter Bildung einer Kammer in einem definierten Abstand parallel zueinander zusammengefugt sind, wobei wenigstens eines der beiden zusammengefugten Teile aus Keramik, Glas, Metall oder einem einkristallinen Material besteht. In Abhangigkeit von dem auf den Drucksensor einwirkenden auseren Druck andert sich der Abstand zwischen diesen Teilen und damit die Kapazitat zwischen zwei von diesen Teilen getragenen Elektroden. Der Grundkorper und die Membran sind durch ein zugleich als Abstandshalter dienendes Formteil aus Metall thermisch miteinander verbunden. Wenn wenigstens eines der beiden Teile aus Keramik, Glas, Metall oder einem einkristallinen Material besteht, konnen die beiden zusammengefugten Teile durch ein Formteil aus Aktivlot miteinander verlotet sein. Wenn die beiden zusammengefugten Teile aus Oxidkeramik oder Saphir bestehen, konnen sie nach dem "direct copper bonding"-Verfahren miteinander verbunden sein. In diesem Fall besteht das Formteil aus Kupfer, das durch eine sich an der Oberflache ausbildende eutektische Schmelze mit den beiden Teilen verbunden ist.
ABSTRACT WORD COUNT: 159

LEGAL STATUS (Type, Pub Date, Kind, Text):

Application:	900124 A2	Published application (A1with Search Report ;A2without Search Report)
Search Report:	910626 A3	Separate publication of the European or International search report
Examination:	910918 A2	Date of filing of request for examination: 910724
Examination:	920401 A2	Date of despatch of first examination report: 920217
Grant:	930602 B1	Granted patent

Oppn None: 940525 B1 No opposition filed
LANGUAGE (Publication,Procedural,Application): German; German; German
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	EPBBF1	526
CLAIMS B	(German)	EPBBF1	489
CLAIMS B	(French)	EPBBF1	597
SPEC B	(German)	EPBBF1	2058
Total word count - document A			0
Total word count - document B			3670
Total word count - documents A + B			3670

5/5/4 (Item 1 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT

00178831
A CAPACITIVE PRESSURE SENSOR AND A PROCESS FOR ITS MANUFACTURE
CAPTEUR CAPACITIF DE PRESSION ET SON PROCEDE DE FABRICATION
Patent Applicant/Assignee:
ENDRESS U HAUSER GMBH U CO,
Inventor(s):
DITTRICH Gerhard ,
HEGNER Frank,
KLAHN Thomas
Patent and Priority Information (Country, Number, Date):
Patent: WO 9012299 A1 19901018
Application: WO 90EP482 19900324 (PCT/WO EP9000482)
Priority Application: DE 3910646 19890401
Designated States: AT BE CA CH DE DK ES FR GB IT JP LU NL SE
Main International Patent Class: G01L-009/12
Publication Language: German
Fulltext Availability:
Detailed Description
Claims
Fulltext Word Count: 3398
English Abstract
The capacitive pressure **sensor** (10) contains two aluminium oxide ceramic plates (11, 12) which are fitted together in the peripheral region parallel to and at a certain distance from each other to form a chamber (14). At least one of the two plates (11) takes the form of a flexible diaphragm. A coating of pure nickel (16, 18) is applied to the surface of each plate by currentless chemical separation from an aqueous solution and the nickel coating is structured to form capacitor electrodes (17, 20, 21) on facing surfaces of both plates. The capacitor electrodes are connected to an electronic circuit fitted outside the chamber (14) by connectors consisting of further nickel coatings produced in metallised holes (30, 31, 32) at the same time as the pure nickel coatings are applied.

French Abstract
Un capteur capacitif de pression (10) comprend deux plaques (11, 12) en ceramique a oxyde d'aluminium assemblees avec un ecartement defini de sorte que leurs circonferences soient paralleles, formant une chambre (14) entre les deux. Au moins une des deux plaques (11) forme une membrane elastique. La surface de chaque plaque est revetue par immersion dans une solution aqueuse de nickel d'une couche en nickel pur (16, 18) chimiquement precipite. Des electrodes condensatrices (17, 20, 21) sont formees par structuration de la couche de nickel sur les faces de deux plaques tournees l'une vers l'autre. Les electrodes condensatrices sont connectees a un circuit electronique situe a l'exterieur de la chambre (14) par des conducteurs de raccordement formes de couches de nickel supplementaires appliquees dans des orifices metallises (30, 31, 32) en meme temps que la couche en nickel pur.

5/5/5 (Item 1 from file: 350)
DIALOG(R)File 350:Derwent WPIX

014564553 **Image available**
WPI Acc No: 2002-385256/200242
XRPX Acc No: N02-301661

Method for provision of measurement values for a process control system, in which determination of costs is based on the number of measurement values transferred from a sensor rather than on the cost of the sensor itself

Patent Assignee: ENDRESS & HAUSER GMBH & CO (ENDR)
Inventor: **DITTRICH G**
Number of Countries: 093 Number of Patents: 005
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
EP 1189036	A1	20020320	EP 2001107314	A	20010323	200242 B
US 20020040348	A1	20020404	US 2001862502	A	20010523	200242
WO 200225221	A1	20020328	WO 2001EP9033	A	20010804	200242
AU 200193722	A	20020402	AU 200193722	A	20010804	200252
EP 1319171	A1	20030618	EP 2001974110	A	20010804	200340
			WO 2001EP9033	A	20010804	

Priority Applications (No Type Date): DE 1046350 A 20000919
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
EP 1189036	A1	G	8	G01D-009/00	
Designated States (Regional): AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI TR					
US 20020040348	A1			G06F-017/60	
WO 200225221	A1	G		G01D-009/00	
Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW					
Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GR IE IT LU MC NL PT SE TR					
AU 200193722	A			G01D-009/00	Based on patent WO 200225221
EP 1319171	A1	G		G01D-009/00	Based on patent WO 200225221
Designated States (Regional): AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI TR					

Abstract (Basic): EP 1189036 A1

NOVELTY - Method for provision of measurement values for end customers in which the value of a process variable is measured using a **sensor** (S1, S2, S3), the value is transferred to a process control system (PLS), the number of transfer processes is counted and the customer is billed on the basis of the number of transfers of the measurement value.

USE - The invention relates to the provision of process control data by a third party to a organization operating a plant or system requiring process control data.

ADVANTAGE - The end customer does not pay for the **sensor** itself, rather the measurement data itself is paid for, which may provide cost savings.

DESCRIPTION OF DRAWING(S) - Figure shows a block diagram of a process control system.

Sensors (S1, S2, S3)
Process control system (PLS)
pp; 8 DwgNo 1/2

Title Terms: METHOD; PROVISION; MEASURE; VALUE; PROCESS; CONTROL; SYSTEM; DETERMINE; COST; BASED; NUMBER; MEASURE; VALUE; TRANSFER; SENSE; COST; SENSE
Derwent Class: S02; T06
International Patent Class (Main): G01D-009/00; G06F-017/60

File Segment: EPI

5/5/6 (Item 2 from file: 350)
DIALOG(R)File 350:Derwent WPIX

008419184 **Image available**
WPI Acc No: 1990-306185/199041
XRAM Acc No: C90-132225
XRPX Acc No: N90-235372

Capacitive pressure sensor **- with capacitor electrodes formed by structuring metallisation on** sensor **plates**

Patent Assignee: ENDRESS & HAUSER GMBH & CO (ENDR); DITTRICH G (DITT-I); ENDRESS & HAUSER GM (ENDR-N)
Inventor: **DITTRICH G** ; HEGNER F; KLAEHN T; KLAHN T
Number of Countries: 016 Number of Patents: 009
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
DE 3910646	A	19901004	DE 3910646	A	19890401	199041 B
WO 9012299	A	19901018				199044
EP 417237	A	19910320	EP 90904838	A	19900324	199112
US 5001595	A	19910319	US 90498016	A	19900323	199114
JP 3501063	W	19910307	JP 90504923	A	19900324	199116
EP 417237	B1	19921111	EP 90904838	A	19900324	199246
			WO 90EP482	A	19900324	
DE 59000456	G	19921217	DE 500456	A	19900324	199252
			EP 90904838	A	19900324	
			WO 90EP482	A	19900324	
DE 3910646	C2	19930121	DE 3910646	A	19890401	199303
CA 2028835	C	19980929	CA 2028835	A	19900324	199849

Priority Applications (No Type Date): DE 3910646 A 19890401
Cited Patents: DE 3137219; EP 111348; EP 97339
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
DE 3910646	A		8		
WO 9012299	A				
Designated States (National): CA JP					
Designated States (Regional): AT BE CH DE DK ES FR GB IT LU NL SE					
EP 417237	A				
Designated States (Regional): AT BE CH DE ES FR GB IT LI LU NL SE					
US 5001595	A		8		
EP 417237	B1	G	11	G01L-009/12	Based on patent WO 9012299
Designated States (Regional): AT BE CH DE DK ES FR GB IT LI LU NL SE					
DE 59000456	G			G01L-009/12	Based on patent EP 417237
					Based on patent WO 9012299
DE 3910646	C2		8	G01L-009/12	
CA 2028835	C			G01L-007/08	

Abstract (Basic): DE 3910646 A

(A) A capacitive pressure **sensor** has two ceramic plates joined at their periphery to form a sealed internal chamber, at least one of the plates being in the form of a membrane and one or each plate having, on its inner face facing the other plate, one or more capacitor electrodes connected to electronic circuitry outside the chamber. The novelty is that an adherent metallisation layer is applied to the surface of each plate and that the capacitor electrodes are formed by structuring the metallisation layers. (B) Prodn. of the pressure **sensor** involves (a) producing two ceramic plates, at least one of which is in the form of an elastic membrane; (b) forming holes through at least one of the plates, (c) applying an adherent metallisation layer onto the surface of each plate and on the peripheral faces of the holes; (d) structuring the layers to form capacitor electrodes and/or conductor lines; (e) assembling the plates, together with a moulded part of metal solder inserted in the peripheral region of the plates; and (f) heating the assembly to melt the metal solder.

ADVANTAGE - The pressure **sensor** is simple and inexpensive to mfr. and has very good mechanical, thermal and electrical properties. (8pp Dwg.No.1/6)

Title Terms: CAPACITANCE; PRESSURE; SENSE; CAPACITOR; ELECTRODE; FORMING; STRUCTURE; METALLISE; SENSE; PLATE

Derwent Class: L03; S02; V01; V04

International Patent Class (Main): G01L-007/08; G01L-009/12

International Patent Class (Additional): C04B-035/10; C04B-041/88; C23C-018/31; H01G-001/14; H01G-005/18; H01G-007/00; H05K-001/16; H05K-003/46

File Segment: CPI; EPI

5/5/7 (Item 3 from file: 350)

DIALOG(R)File 350:Derwent WPIX

008137112 **Image available**

WPI Acc No: 1990-024113/199004

XRPX Acc No: N90-018460

Capacitive pressure transducer with thermal bonded flexible diaphragm - employs ceramic or glassy materials for diaphragm and baseplate compatible with active soldering or copper bonding

Patent Assignee: ENDRESS & HAUSER GMBH & CO (ENDR); ENDRESS & HAUSER GM (ENDR)

Inventor: **DITTRICH G** ; HEGNER F; KLAEHN T; KLAHN T

Number of Countries: 011 Number of Patents: 010

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
EP 351701	A	19900124	EP 89112733	A	19890712	199004	B
DE 3901492	A	19900125	DE 3901492	A	19890119	199005	
DE 3943475	A	19900621	DE 3943475	A	19890119	199026	
DE 3901492	C	19901011				199041	
US 5005421	A	19910409	US 89381502	A	19890718	199117	
DE 3943475	C	19910725				199130	
EP 351701	B1	19930602	EP 89112733	A	19890712	199322	
DE 58904551	G	19930708	DE 504551	A	19890712	199328	
			EP 89112733	A	19890712		
ES 2041376	T3	19931116	EP 89112733	A	19890712	199350	
CA 1327895	C	19940322	CA 604678	A	19890704	199417	

Priority Applications (No Type Date): DE 3901492 A 19890119; DE 3825029 A 19880722; DE 3943475 A 19890119

Cited Patents: A3...9126; DE 2706505; DE 3137219; DE 3404262; No-SR.Pub

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
EP 351701	A	G	6		
Designated States (Regional): CH DE ES FR GB IT LI NL SE					
EP 351701	B1	G	8	G01L-009/12	
Designated States (Regional): CH DE ES FR GB IT LI NL SE					
DE 58904551	G			G01L-009/12	Based on patent EP 351701
ES 2041376	T3			G01L-009/12	Based on patent EP 351701
CA 1327895	C			G01L-009/12	

Abstract (Basic): EP 351701 A

A circular diaphragm (11) with plane-parallel surfaces is sepd. by an annular metallic distance piece (20) from the baseplate (12). Both diaphragm (11) and baseplate (12) may be mfd. of ceramic, glass or monocrystalline material and thermally bonded to the spacer (20) by active solder including strongly reactive Ti,Zr,Be,Hf, or Ta.

Alternatively the diaphragm (11) and baseplate (12) may be mfd. of oxide ceramic or sapphire and joined to a Cu spacer (20) by direct Cu bonding, forming an eutectic melt of Cu and Cu20 at 1065 deg.C. The facing surfaces of the diaphragm (11) and baseplate (12) carry circular metallic conductive electrodes (14,15) from which leads (16,17) are taken out through gastight seals.

ADVANTAGE - Robust device can operate over wide temp. range without creep, hysteresis or variation in sensitivity.

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Title Terms: CAPACITANCE; PRESSURE; TRANSDUCER; THERMAL; BOND; FLEXIBLE; DIAPHRAGM; EMPLOY; CERAMIC; GLASS; MATERIAL; DIAPHRAGM; BASEPLATE; COMPATIBLE; ACTIVE; SOLDER; COPPER; BOND

Derwent Class: S02

International Patent Class (Main): G01L-009/12

International Patent Class (Additional): G01L-007/08

File Segment: EPI

5/5/8 (Item 1 from file: 95)

01148478 E97100483031

Entwicklung einer portierbaren PROFIBUS-DP Protokollsoftware

Deicke, P; Haehniche, J; Hintze, E; Poeschmann, A; Hueckinghaus, P; **Dittrich, G**
ifak Magdeburg, D; BARMAG Remscheid, D; Kuhnke Malente, D

1996
Document type: Report Language: German
Record type: Abstract
ISBN: 3-8163-0330-7

ABSTRACT:
Die Entwicklung der Automatisierungstechnik fuehrte zu einer zunehmenden Digitalisierung der Informationen in kleinen Feldgeraeten, wie Sensoren, Aktuatoren, Messumformern und einfachen Steuerungen. Die Anzahl der von einer speicherprogrammierbaren Steuerung auszuwertenden Messgroessen und der anzusteuernden Aktuatoren ist in modernen Automatisierungsanlagen erheblich gestiegen. Daher erfolgt der Verbund einfacher Feldgeraete auch in der untersten Ebene immer haeufiger ueber serielle Feldbusse. Ziel des Forschungsprojektes war es, Voraussetzungen fuer die Entwicklung modularer und portierbarer Protokollsoftware fuer zeitkritische Anwendungen zu schaffen, wie sie im Bereich der **Sensor** - und Aktuatoranwendung benoetigt wird. Dabei kam eine Implementierungsmethodik fuer Kommunikationsprotokolle zum Einsatz, deren Vorteile und prinzipielle Anwendbarkeit in dem Forschungsprojekt 'Portierbare Schicht 7 Implementierung fuer den PROFIBUS als Sensorbus' nachgewiesen wurde. Nunmehr wurde anhand des DP-Protokolls gezeigt, dass sich die Methodik auch fuer die Implementierung eines Kommunikationsprotokolls mit hohen Echtzeitanforderungen eignet. Als Ergebnis diese Forschungsvorhabens liegen universelle, parametrierbare und konfigurierbare Softwarekomponenten fuer die verschiedenen Arten von PROFIBUS-Protokollen vor, die eine adaequate Ausgangsbasis fuer die Entwicklung sowohl einfacher DP-Anschaltungen als auch komplexer Systemloesungen bilden. Die Deutsche Norm DIN 19245 'PROFIBUS' beschreibt einen offenen Feldbusstandard mit grosser Funktionsvielfalt, welche den Einsatz dieses Bussystems in der Steuerungs- und Zellenebene bis hin zur Feldebene ermoeglicht. Fuer Anwendungen im Bereich der Dezentralen Peripherie mit der Forderung nach kurzen Systemreaktionszeiten wurde die DIN 19245 um das Protokoll PROFIBUS -Dezentrale Peripherie (DP) ergaenzt. Das PROFIBUS-DP-Protokoll hat die Aufgabe, zentrale Automatisierungsgeraete, wie z.B. speicherprogrammierbare Steuerungen, ueber eine sehr schnelle serielle Verbindung mit den dezentralen Eingangs- und Ausgangsgeraeten, Sensoren, Aktuatoren sowie kleineren vorverarbeitenden Einheiten zu verbinden, um Nutz-, Parametrier-, Diagnose- und Konfigurierungsdaten zu uebertragen.

DESCRIPTORS: AUTOMATISATION; BUS SYSTEMS; COMPUTER SOFTWARE; IMPLEMENTATION ; COMMUNICATION PROTOCOLS; RESEARCH PROJECTS; DIN STANDARDS; FIELD BUS; PROCESS FIELD BUS
IDENTIFIERS: PROTOKOLLSOFTWARE; PROFIBUS; Feldbus; Protokollsoftware